

WHAT IS CLAIMED IS:

1. A glass, comprising:  
a first glass phase consisting essentially of Si and O; and  
a second glass phase consisting essentially of Si, Al and O, wherein  
said second glass phase has a mass ratio of Al to Si of at least 0.01.

2. A plasma resistant component made of a glass, wherein  
said glass comprises:  
a first glass phase consisting essentially of Si and O; and  
a second glass phase consisting essentially of Si, Al and O, wherein  
said second glass phase has a mass ratio of Al to Si of at least 0.01.

3. A component, which is made of a glass and is for use in forming  
an electromagnetic wave-transparent window, wherein  
said glass comprises:  
a first glass phase consisting essentially of Si and O; and  
a second glass phase consisting essentially of Si, Al and O, wherein  
said second glass phase has a mass ratio of Al to Si of at least 0.01.

4. A plasma processing apparatus for carrying out a process with  
plasma generated by using an electromagnetic wave, comprising:  
a component made of a glass, which is transparent to said  
electromagnetic wave and is used for introducing said electromagnetic wave  
into a chamber in which said plasma is generated, wherein  
said glass comprises:  
a first glass phase consisting essentially of Si and O; and  
a second glass phase consisting essentially of Si, Al and O, wherein  
said second glass phase has a mass ratio of Al to Si of at least 0.01.